

## REMARKS

### I. Paragraphs 1-3

Applicant expresses appreciation for the indication that the previous rejections have been withdraw.

### II. Paragraphs 4-7: The prior art rejection based on Diamond

The claims have been rejected alternatively as anticipated or obvious from Diamond U.S. 5,384,089. We analyze the claims before proceeding to analyze the rejection. Claim 1 specifies a 22k gold composition that includes specified amounts of silver, cobalt and copper to provide desirable properties for the jewelry-making industry. Specifically, the claimed composition is limited to 22k gold, and has properties that enable the use of standard machine fabrication techniques, such as stamping, wire drawing and threading, on 22karat material while maintaining desirable color. These achievements are not trivial or routine.

The rejection continues to rely on both anticipation and obviousness, which are two entirely different concepts in patent law that should not be confused. We respond to both rejections below.

#### A. *Diamond '089 does not anticipate the claims; overlap by itself does not equal anticipation; a case-by-case analysis is required.*

Initially, the anticipation rejection contains no analysis at all. The sum total of the analysis is in the following sentence at page 3, lines 1-2 of the office action,

**The ranges of Ag, Co and Cu disclosed by Diamond overlap the presently claimed ranges, thus anticipating those ranges. See MPEP 2131.03.**

The rejection assumes that overlap by itself constitutes anticipation, but that assumption is flatly wrong under the law. A prior reference that discloses ranges overlapping a later reference does NOT automatically anticipate the later reference. Applicant agrees with the Examiner that the MPEP provides the analytical framework for evaluating the art in this situation (see MPEP §2131.03, emphasis added):

When the prior art discloses a range which touches, overlaps or is within the claimed range, but no specific examples falling within the claimed range are disclosed, a case by case determination must be made as to anticipation. In order to anticipate the claims, the claimed subject matter must be disclosed in the reference with "sufficient specificity to constitute an anticipation under the statute". Emphasis is added.

So it is clear that overlap by itself does not support an anticipation rejection under 35 U.S.C. §102. A case-by-case analysis is required.

Rather than provide the required case-by-case analysis, the Examiner concludes that the broad ranges should be given the same weight as the specific examples in the prior art, which do not teach the invention. Thus the Examiner says in paragraph 7 of the office action,

**Applicant is reminded that the disclosure of the prior art should not be construed as being limited only to the specific examples contained therein. See *In re Fracalossi [et al.]*, 215 USPQ 569 (CCPA 1982).**

With all due respect, Applicant is not ignoring any aspect of the disclosure in Diamond. The general ranges that the examiner cites are indeed a part of that disclosure, but the law is clear that those general ranges do not automatically support a rejection under §102

**B. *Diamond '089 does not anticipate the claims; the alternative analysis relying on Peterson '046 does not explain how Diamond by itself puts the art in possession of the invention.***

Having erroneously relied on the general ranges in Diamond as automatically supporting a rejection under §102, the Examiner then provides an alternative rationale for the rejection. In putting forth this alternative rationale for the rejection, the Examiner agrees (page 3, lines 3-4) that,

**"none of the examples disclosed by Diamond fall within the presently claimed range...."**

Nevertheless, the Examiner concludes that it would have been within the expected skill of a routineer in the art,

**"to have selected values from within the broadly disclosed ranges of Diamond in order to optimize the functions of Ag, Co and Cu, particularly for the silver for desired color and malleability (see Peterson [U.S. 2,223,046] at col. 4, lines 38-41),**

**the cobalt for grain refinement (see Diamond at col. 4, lines 38-41) and copper for desired color and hardness (see Peterson at col. 3, lines 65-69)."**

From the above quotations, is not clear whether this alternative is supposed to support a rejection under §102 (anticipation) or §103 (obviousness). We will respond to both possible rejections.

First, under §102, Applicant considers the possibility that "alternative" analysis is intended to be the case-by-case determination required by the MPEP and the case law. If so, the alternative analysis fails to satisfy that requirement. The case-by-case analysis required in this situation involves a judgment about whether the reference that teaches a broad range (in this case, Diamond) effectively puts the art in possession of the narrower range specified in the claims. If it does not, there is no anticipation. Further guidance comes from the case law, such as the Federal Circuit in Minnesota Mining and Manufacturing Co. v. Johnson & Johnson Orthopedics, 24 U.S.P.Q.2d 1321 (1992) ("*3M v. J&J*"), which is discussed in detail in Applicant's response filed January 23, 2003. The Federal Circuit's description of the situation in that case applies directly to the anticipation rejection at issue here.

The ... ranges ... extrapolated from Straube [the prior art reference] are "so broad as to be meaningless to one skilled in the art." The Straube patent provides no guidance as to how to construct a fiberglass cast with the beneficial properties achieved by the [patented] invention; strength, porosity, lightness, and ability to cure quickly. ...[A]lthough [the patent] claims are subsumed in Straube's generalized disclosure of knit fiberglass as a substrate, this is not literal identity.

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In order to anticipate, the Straube patent must sufficiently describe the claimed invention to have placed the public in possession of it. The record establishes that the Straube patent does not do this. Emphasis is added.

The Federal Circuit and the MPEP are very clear that, in the situation we have here, one must review the breadth of the ranges in the prior art and compare that breadth to the breadth of the claimed range.

Below we compare the broad Diamond ranges with the claims in the table below.

Element	Claim 1	Diamond
Gold	22k (91.67%)	8-22 k (33.3-91.6%)
Silver	2.0-6.0%	2.0-22%
Cobalt	0.1-2.0%	0-2.0%
Copper	0.33-8.4%	2.0-47.3%
Boron	0-0.5%	0%

From the table it is clear that one skilled in the art would have to make several selections from the disclosure in Diamond to arrive at an alloy within the limits of claim 1. First, one would have to select the top of Diamond's gold range. Second, one would have to select the bottom of Diamond's copper range. Third, one would have to select the bottom of Diamond's silver range. So the examiner has made not one but three specific selections, picking and choosing from the general description of weight ranges in Diamond to create an alloy that falls within the claims. The problem is, the alloy the examiner constructs is one that Diamond does not disclose. In *3M v. J&J*, the percentage overlap of the prior art range and the range required by the claim was not trivial  $[(9200-20)/(2500-25) = \text{over } 7\%]$ . Note by way of comparison that the claims in this case are limited to one particular gold value. Moreover, in this case, there are selections to be made for each of three ranges (gold, silver and copper) detailed above. To find anticipation, the examiner must conclude that each range is anticipated, cumulatively. Furthermore, as in *3M v. J&J*, the prior art relied upon here by the Examiner provides absolutely no guidance concerning how to make a product having the beneficial properties achieved when operating within the ranges required by the claim.

The Examiner apparently concludes that such guidance can be provided from a second reference, Peterson U.S. 2,223,046. The need to go outside the four corners of Diamond and to combine two references makes it clear that a rejection under §102 is improper. The MPEP 2131.01 concludes that, "Normally, only one reference should be used in making a rejection under 35 U.S.C. 102." The exceptions to that rule do not apply here.<sup>1</sup> The issue of whether

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<sup>1</sup> The exceptions apply where the second reference is used to:

Diamond enables the practice of the invention he claimed in that case is not present in that case. Peterson is not used to explain the meaning of a term used in Diamond. The rejection is not based on inherent but undescribed characteristics of a composition described in Diamond.

Thus, applying the standards provided in the MPEP and in the case law, Diamond by itself, does not anticipate claim 1. As a result, the 35 U.S.C. §102 rejection based on Diamond should be withdrawn.

***C. Neither Diamond alone, nor the combination of Diamond and Peterson, makes the claimed invention obvious.***

So all that remains is the obviousness rejection. First we review the invention and then we review the prior art.

As detailed in the specification, the inventor has realized that it is possible to make a 22 karat gold alloy that has sufficient hardness for jewelry applications without sacrificing desirable color characteristics. Specifically, traditional 22-karat gold jewelry must be relatively thick due to its softness. Substances that harden 22 karat gold may impart undesirable color. The invention permits the use of standard machine fabrication techniques, such as stamping, wire drawing and threading, on 22karat material while maintaining desirable color. Note that the rationale behind the invention and the claims are specific to 22-karat jewelry. Lower karats are not as soft as 22-karat gold and they do not present the same problems.

The examiner concludes that the claimed invention is obvious. A claimed invention cannot be found obvious unless something in the prior art suggests the invention to a person of ordinary skill in the art. Ex parte Clapp, 227 U.S.P.Q. 972, 973 (Bd. App. 1985). The Examiner is required in the first instance to provide a factual (not speculative) basis for an obviousness rejection. As the Court in In re Warner, 154 U.S.P.Q. 173, 179 (C.C.P.A. 1967) explained:

A rejection based on section 103 clearly must rest on a factual basis, and these facts must be interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, all facts must be considered. The Patent Office has the initial duty of supplying the factual basis for its rejection. It may not, because it may doubt that

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- (A) Prove the primary reference contains an "enabled disclosure;"
  - (B) Explain the meaning of a term used in the primary reference; or
  - (C) Show that a characteristic not disclosed in the reference is inherent.

the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in its factual basis.

What then is the basis for the obviousness rejection? As noted, the Examiner takes the view that (page 3, lines 3-4),

**“none of the examples disclosed by Diamond fall within the presently claimed range....”**

Nevertheless, the Examiner concludes that it would have been within the expected skill of a routineer in the art,

**“to have selected values from within the broadly disclosed ranges of Diamond in order to optimize the functions of Ag, Co and Cu, particularly for the silver for desired color and malleability (see Peterson [U.S. 2,223,046] at col. 4, lines 6-9), the cobalt for grain refinement (see Diamond at col. 4, lines 38-41) and copper for desired color and hardness (see Peterson at col. 3, lines 65-69).”**

So the Examiner concludes that Peterson can somehow be combined with Diamond to produce the claimed invention.<sup>2</sup> i.e., the Examiner apparently takes the position that Peterson provides a motivation or suggestion to select the claimed alloy from broad ranges of Diamond. In particular, the specific teaching in Peterson that the Examiner relies on is at col. 3, lines 65-69,

**The copper content may vary from about 11% to about 67%, by weight, of the alloy, depending upon the color, hardness, and other qualities desired of the alloy. Less than 11% copper ordinarily produces an unsatisfactory alloy.** [Emphasis is added.]

So where does that leave the obviousness rejection? One skilled in the art would start from Diamond's teaching to use from 2.0-47.33% copper. The Examiner recognizes that teaching does not put the art in possession of the use of compositions having 0.33-8.4% copper. So the Examiner combines Diamond's teaching with Peterson's admonition that, “Less than 11% copper ordinarily produces an unsatisfactory alloy.” How in the world would the art use those teachings to arrive at the claimed copper range (0.33-8.4% copper)? And even if one did so, acting directly against Peterson's admonition and without any other rationale, how would one make the additional selections required to convert Diamond's broad ranges into the invention?

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<sup>2</sup> The formal statement of the §103 rejection relies on Diamond alone, and not on the combination of Diamond and Peterson. Paragraph 6 says, “Claims 1-12 are rejected...in the alternative, under 35 U.S.C. 103(a) as obvious over Diamond (US 5,384,089).” Notwithstanding the formal statement above, it appears from the office action that the §103 rejection relies on the combination of Diamond and Peterson, as discussed above.

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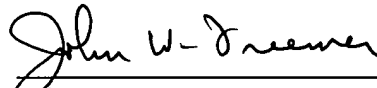
Nothing in Peterson or Diamond provides any teachings that solve the specific problems of 22 karat gold alloys.

Analyses under both §102 and §103 show that the claims are neither anticipated by the prior art (Diamond) nor are they obvious from the prior art (either Diamond alone or the combination of Diamond and Peterson).

Applicant asks that all claims be allowed. Enclosed is a \$930.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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